















Telehealth Evaluation

Population Health Assessment

June 2014

Prepared for: Idaho Telehealth Task Force

Prepared by: ICF Incorporated, LLC

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	1
Introduction	2
Data Variables	3
DESCRIPTION OF IDAHO AND ITS REGIONS	
Idaho Demographics	<u>5</u>
Current State of Health in Idaho	9
Access to Healthcare Services	12
Limitations	18
Next Steps	18

APPENDICES

Appendix A: Critical Access Hospital Questionnaire

Appendix B: Critical Access Hospitals in Idaho

ACKNOWLEDGEMENTS

We would like to acknowledge the extensive contributions of the Statewide Healthcare Innovations Plan (SHIP), which provided much of the data statistics and information included in this assessment. We support this document continuing to inform the expansion of health services in Idaho by providing a foundational knowledge of the current health arena in Idaho.

We would also like to recognize and thank the following people for their time, commitment, and contributions to the development of the Population Health Assessment.

Idaho Telehealth Task Force Executive Committee

- Lynda Bennett, MA
- Stacey Carson
- Marc Chasin, MD
- Robert Cuoio, MBA
- Rick Goodwin, MS, MBAH
- William Hazle, MD
- Nancy Kerr, RN, MEd
- Casey Meza

- Michael Meza, MD
- David Morledge, PhD, CCC-A, DABNM, FASNM
- John Rusche, M.D., FAAP Minority Leader, Idaho House of Representatives
- Tiffany Whitmore Seibert, MPA

Idaho Department of Health and Welfare

Deputy Director Denise Chuckovich, MS

ICF International

- Marnie House, EdD
- Teri Johnson, MBA
- Lara Malakoff, MURP

- Danielle Nielsen, MPH
- Michelle Revels, PhD
- Dara Schlueter, MPH

INTRODUCTION

The ICF evaluation team conducted a population health assessment to inform an initiative to expand telehealth services throughout Idaho. This expansion of telehealth services would aim to promote and increase access to safe and effective medical care across all regions within the State, particularly enhancing access for individuals residing in rural areas.

ICF team members gathered and synthesized data from several secondary sources to gain a comprehensive picture of Idaho's health status. It is important to note that only publicly available secondary data sources were used for this assessment—no primary data were collected or analyzed. The following secondary sources helped to provide a comprehensive view of Idaho's health factors, outcomes, and needs.

Telehealth Questionnaire: Idaho Critical Access Hospitals

In July 2013, the Idaho Telehealth Taskforce administered a questionnaire to all 27 critical access hospitals in Idaho. Survey responses were received from 14 of these hospitals. The purpose of the questionnaire was to conduct an inventory of the hospitals' telemedicine services, resources, and needs to inform the expansion of telehealth services in Idaho. See Appendix A for the questionnaire.

Idaho Statewide Healthcare Innovation Plan (SHIP)

In December 2013, the Idaho Department of Health and Welfare developed a plan to inform a redesign of the State primary care system to a patient-centered medical home (PCMH) model of patient-centered, team-based, coordinated care. The plan has been endorsed by public and private payers; health care providers, consumers; and health care services throughout the State.

Indicators Idaho

Developed by the University of Idaho, this Web site highlights major health trends for states, counties, reservations, and tribes. Data are derived from a wide range of sources, including the U.S. Census Bureau, U.S. Bureau of Labor Statistics, U.S. Bureau of Economic, U.S. Bureau of Indian Affairs, and various State reports.

Behavioral Risk Factor and Surveillance System (BRFSS)

A nationwide telephone-based surveillance system that gathers state-level prevalence of the major behavioral risks among adults associated with premature morbidity and mortality. These data on adult behaviors are used to plan, initiate, support, and evaluate health promotion and disease prevention programs.

Idaho County Health Rankings and Road Maps

A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, this annual measure of State- and county-level health behaviors and outcomes provides a snapshot of health status throughout the State. Available data include high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of

June 2014 Page 2 of 18

air and water, income, and teen births in nearly every county in the United States. Also included are guidance tools to help understand the data and strategies that communities can use to move from education to action.

Health Resources and Services Administration (HRSA) Data Warehouse

A repository of data from more than 30 HRSA and other Federal Government sources, these data are integrated with external sources, such as the U.S. Census Bureau, enabling users to gather relevant and meaningful information about health care programs and the populations they serve.

Idaho Health Statistics

Developed by the Idaho Department of Health and Welfare, this data system provides a comprehensive collection of State-level data from the Vital Statistics, BRFSS and the Pregnancy Risk Assessment Tracking System for assessment, surveillance, and evaluation.

DATA VARIABLES

The ICF team considered a wide range of data variables to include in this assessment. Specifically, the team aimed to identify and assess a collection of variables that would paint a comprehensive picture of Idaho's health status. These variables fell into the following categories:

- Geographic factors: factors that relate to a place, a specific area or environment that may affect health behaviors or outcomes.
- **Demographic characteristics:** quantifiable subsets within a given population that help to characterize that population at a specific point in time. Common demographics examined include gender, age, race/ethnicity, and employment status.
- **Health factors**: key influencers of health outcomes. Examples of health factors are nutritional habits, exercise, substance abuse, and childhood immunizations.
- **Health outcomes:** measures of how long people live, how healthy people feel, rates of chronic disease, and the top causes of death.
- **Health needs**: the programs, services, and policies needed to positively affect health outcomes and their related health factors. This includes access to and use of local and State health care services.

When possible, data were considered at both the State and regional level; however, in most cases, regional level data were not available for the data variables of interest. When available, data that describe tribal communities and territories are included.

DESCRIPTION OF IDAHO AND ITS REGIONS

The population health assessment focuses on Idaho as the main service area of interest. Idaho is a mountainous State in the Pacific Northwest region of the United States. The total population of Idaho is 1,612,136. From 2010–2013, the State's population increased 2.6%. The State's Hispanic population has continuously grown at a high rate, with an increase of 82.1% from 2000-2010 and an overall population of 185,160 in 2012. Idaho is an important agricultural state, producing nearly one-third of the potatoes grown in the United States.² Wheat, sugar beets and alfalfa hay are also major crops. Mining and lumber industries have also been important. Thirty five of Idaho's counties are rural,³ accounting for approximately 88% of the State's land area. Exhibit A is a detailed map of Idaho's counties and regions, with respective populations.



EXHIBIT A. STATE OF IDAHO COUNTIES, REGIONS, AND POPULATIONS

- Region 1 (Benewah, Bonner, Boundary, Kootenai and Shoshone counties)
- Region 2 (Clearwater, Idaho, Latah. Lewis and Nez Perce counties)
- Region 3 (, Adams, Canyon, Gem, Owyhee, Payette, and Washington counties)
- Region 4 (Ada, Boise, Elmore, and Valley counties)
- Region 5 (Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka and Twin Falls counties)
- Region 6 (Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida and Power counties)
- Region 7 (Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison and Teton counties)

¹ http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16000

² Beedasy, Jaishree. "Rural Designations and Geographic Access to Tertiary Healthcare in Idaho." The Online Journal of Rural Research and Policy 5.2 (2010): 1-21

³ Rural counties are defined as those with no cities with more than 20,000 residents.

⁴ http://irp.idaho.gov/

Idaho Population by Region					
United States	313,873,685				
Idaho	1,612,136				
Region 1: Panhandle	212,393				
Region 2: North Central	105,358				
Region 3: Southwest	253,965				
Region 4: Central	436,293				
Region 5: South Central	180,582				
Region 6: Southeastern	163,189				
Region 7: Eastern	204,608				

According to the U.S. Census, Idaho is the 19th fastest growing State.⁵ It is primarily a rural State that is characterized by a harsh topography and sparse population.⁶ The State's expansive landscape and harsh terrain create problems of distance and isolation for residents, particularly when it comes to obtaining health care services. Compared with their urban counterparts, the most remote and rural counties in Idaho consistently have lower per capita incomes, higher unemployment rates and poverty levels, and smaller job growth. The most rural communities have considerable needs for transportation infrastructure, utility services, and education opportunities.⁶

Geographical access to health services is one aspect of access that presents barriers of cost, time and inconvenience. Rural, low-income, and minority communities often suffer the most as a result of unbalanced distribution of health care providers and services. Informed strategies that improve access to primary and specialty health care services can potentially exert significant positive effects on the health care disparities in rural populations.⁶

IDAHO DEMOGRAPHICS

The following sections present key demographic information about Idaho to provide insight into the population makeup and context for expanded telehealth service needs.

Racial/Ethnic Background

With respect to race/ethnicity, Idaho is fairly homogenous. Most Idaho residents identify as non-Hispanic White, with the largest minority groups being Hispanic and American Indian/Alaska Native. Exhibit B provides an overview of racial/ethnic backgrounds in Idaho compared with the U.S. in 2012.⁷

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014

Page 5 of 18

⁵ http://quickfacts.census.gov/qfd/states/16000.html

⁶ Beedasy, Jaishree. "Rural Designations and Geographic Access to Tertiary Healthcare in Idaho." The Online Journal of Rural Research and Policy 5.2 (2010): 1-21

⁷ http://quickfacts.census.gov/qfd/states/16000.html

EXHIBIT B. RACIAL/ETHNIC POPULATIONS IN IDAHO, 2012

Racial/ethnic groups	Idaho	United States
White (non-Hispanic or Latino)	83.5%	63%
Black or African American	0.8%	13.1%
American Indian and Alaska Native	1.7%	1.2%
Asian	1.4%	5.1%
Native Hawaiian and Other Pacific Islander	0.2%	0.2%
Two or More Races	2.2%	2.4%
Hispanic or Latino	11.6%	16.9%

As illustrated, Hispanics comprise the largest racial/ethnic minority group in Idaho. Most Hispanic residents (24%) live in Canyon County. Below is a list of the top ten Idaho Counties by Hispanic population.

Canyon: 45,069Ada: 27,905Bonneville: 11,912

Twin Falls: 10,570
Bingham: 7,864
Jerome: 6,929
Minidoka: 6,493
Cassia: 5,724
Bannock: 5,587
Kootenai: 5,268

While African-American, Hispanic, and Asian populations are underrepresented in Idaho, the American Indian/Alaska Native population than in the overall U.S. Idaho is home to six federally-recognized tribes: Coeur d'Alene Tribe, Kootenai Tribe of Idaho, Nez Perce Tribe, Shoshone-Bannock Tribes, the Northwestern Band of the Shoshone Nation, and the Shoshone-Paiute Tribe.⁹

Median Household Income

Idaho's median household income falls below the national median. While the average median household income in the U.S. between 2008 and 2012 was \$53,046, Idaho's was \$47,015. Data for regional level median household incomes are not available. Exhibit C provides an overview of median household incomes by county in 2012. 11

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014

Page 6 of 18

.

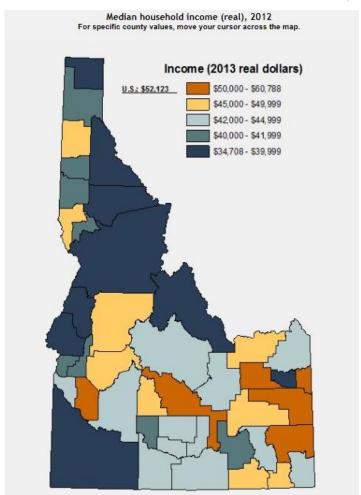
⁸ http://icha.idaho.gov/menus/idaho_counties.asp

⁹ Federal Register, Vol. 77, No.155. August 10, 2012

¹⁰ http://quickfacts.census.gov/qfd/states/16000.html

¹¹ http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawStaticMap&StaticMapID=628

EXHIBIT C IDAHO MEDIAN HOUSEHOLD INCOME BY COUNTY, 2012



Educational Attainment

Education levels in Idaho are comparable to those across the U.S. Most notably, more Idahoans complete high school and obtain associate degrees when compared with the overall U.S. population. Exhibit D provides an overview of educational attainment in Idaho compared with the U.S. ^{12,13}

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014 Page 7 of 18

 $^{^{12}}$ Data present average percentages of educational attainment for Idahoans age 25 or older from 2008–2012

¹³ http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16000&IndicatorID=100043

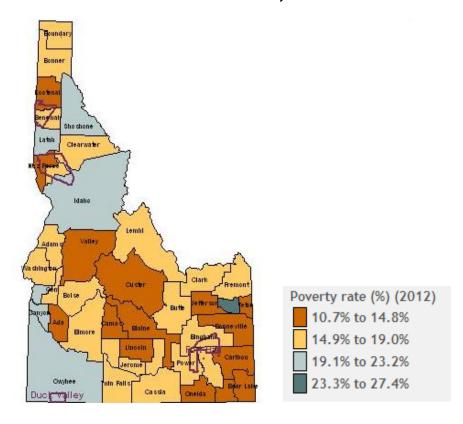
EXHIBIT D. HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT IN IDAHO AND THE U.S., 2008–2012

Education Level	Idaho	United States
No high school diploma	11.4%	14.3%
High school graduate	28%	28.5%
Some college, no degree	27%	21.3%
Associate degree	9%	7.5%
Bachelor's degree	17%	17.5%
Graduate or professional degree	8%	10.2%

Poverty

The rate of poverty is defined as the percentage of people living beneath the poverty line or "threshold" in a given year. In 2012, the rate of poverty in Idaho was comparable to that of the overall U.S. (16% vs. 15.9%, respectively). However, this rate illustrated significant growth as the poverty rate increased from 11.8% in 1999. When all States are ranked from the highest to lowest poverty rates, Idaho ranks 22nd and the State has a higher poverty rate than more than half of the states in the country. Exhibit E illustrates poverty rates across all Idaho counties and tribal communities.¹⁴

EXHIBIT E. POVERTY RATES BY COUNTY AND TRIBE, 2012



¹⁴ http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16000

Telehealth Evaluation: Population Health Assessment

June 2014 Page 8 of 18

_

Tribal Communities

Idaho is home to six federally recognized tribes: Coeur d'Alene Tribe, Kootenai Tribe of Idaho, Nez Perce Tribe, Shoshone-Bannock Tribes, the Northwestern Band of the Shoshone Nation, and the Shoshone-Paiute Tribe. ¹⁵ Exhibit F provides a snapshot of demographic information across five of the six tribal communities as they compare with overall State data. ¹⁶

EXHIBIT F. DEMOGRAPHIC DATA FOR IDAHO TRIBES¹⁷

	Coeur d'Alene	Kootenai	Nez Perce	Shoshone- Bannock (Fort Hall)	Shoshone-Paiute Tribe (Duck Valley)
Population ¹⁸	1,247	43	2,310	3,558	1,215
Median Household Income ¹⁹	\$31,473	\$44,046	\$48,883	\$32,699	\$31,536
Educational At	tainment ²⁰				
No high school diploma	13%	51.6%	10.4%	25.5%	18.1%
High school graduate	35%	48.4%	34.7%	35.1%	45.5%
Some college, no degree ²¹	44.4%	0%	45.4%	31.1%	30.9%
Bachelor's or graduate degree	7.6%	0%	9.5%	8.4%	5.5%
Poverty ²²	29%	Not available	22%	25%	26%

CURRENT STATE OF HEALTH IN IDAHO

In 2010, the five most costly and preventable chronic conditions cost the nation approximately \$347 billion, which accounted for 30% of total U.S. health spending.²³ In 2008, nearly 50% of all U.S. adults reported having at least one of the six most common chronic illnesses—cardiovascular disease, cancer, chronic obstructive pulmonary disease, asthma, diabetes, or arthritis. The health status of Idahoans is generally considered to be comparable to that of other States; however, there

¹⁵ Federal Register, Vol. 77, No.155. August 10, 2012

¹⁶ Data unavailable for Northwestern Band of the Shoshone Nation.

¹⁷ Tribal data presented for American Indian residents only. Data includes either average rates/percentages from 2006-2010 or 2010 only as noted.

¹⁸ 2010 populations.

¹⁹ Average median household incomes from 2006–2010.

²⁰ Average levels of educational attainment from 2006-2010.

²¹ Includes associate Degree.

²² Average poverty rates from 2006-2010.

²³ http://www.apha.org/NR/rdonlyres/9A621245-FFB6-465F-8695-BD783EF2E040/0/ChronicDiseaseFact FINAL.pdf

are some notable health behaviors and outcomes that cause concern (see Exhibit G^{24} for key health concerns in Idaho). Considering these is important for assessing the overall state of Idahoans' health, as well as determining the need for expanded health services to meet Idahoans' needs.

Overweight and Obesity

Overweight and obesity have been linked to higher risks of developing certain diseases and other health problems. These conditions present a significant area of concern for Idahoans. In 2011, most Idahoans were either overweight or obese–62.3% of adults in Idaho were overweight, and 27.0% of adults in Idaho were obese. Children in Idaho experience a high rate of overweight and obesity as well. In 2011, 13.4% of children were overweight as defined by being above the 85th percentile, but below the 95th percentile for BMI by age and sex, while 9.2% were obese (i.e., at or above the 95th percentile for BMI by age and sex).

Exhibit G: Key Health Concerns in Idaho*

- In 2010, 62.3% of adults were overweight and 27.0 % were obese.
- In 2011, **13.4%** of children were overweight and **9.2%** were obese.
- Idaho ranked 15th in the country in prevalence of adult smokers (17.2% were smokers).
- In 2008–2009, 22.5% of Idahoans age 18 or older had a mental illness.
- Idaho ranked 40th in the nation on the number of suicides per 100,000 population.
- In 2012, Idaho ranked 43rd for the percent of children ages 19 to 35 months who received all recommended vaccines.
- In 2011, 32.0% of Idaho adults in 2011 had a cholesterol check in the past 5 years.
- In 2011, 34.2% of Idaho adults in 2011 had not visited a dentist in the past 12 months.

Substance Use

Tobacco use–particularly smoking–is an area of concern across the State. In Idaho, 17.2% of the adult population were smokers in 2011 (>187,000 individuals). In 2010, Idaho ranked 15th in the country in prevalence of adult smokers, with the 8th highest smoking-attributable mortality rate.²⁸

Use and abuse of medications are a growing area of concern. From 2010-2011, Idaho had the fourth highest nonmedical use of prescription pain relievers in the country among people aged 12 or older at 5.73%, suggesting a growing trend in the misuse of medications in the State. Further, in 2011, 16.6% of Idaho adults were binge drinkers, ²⁸ and 6.2% of Idaho adults were heavy drinkers. ^{29,30}

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014 Page 10 of 18

_

²⁴ Idaho Behavioral Risk Factors: Results from the 2011 Behavioral Risk Factor Surveillance System. Idaho Department of Health and Welfare, Division of Health, Bureau of Vital Records and Health Statistics, 2014.

²⁵ http://www.cdc.gov/obesity/adult/defining.html

²⁶ Idaho Behavioral Risk Factors: Results from the 2010 Behavioral Risk Factor Surveillance System. Boise: Idaho Department of Health and Welfare, Division of Health, Bureau of Vital Records and Health Statistics, 2012. Available at http://healthandwelfare.idaho.gov/Health/VitalRecordsandHealthStatistics/HealthStatistics/Behavioral RiskFactorSurveillanceSystem/tabid/913/Default.aspx

²⁷ Idaho (2013). (SHIP).

²⁸ Binge drinkers defined as males who consumed 5+ drinks and females who consumed 4+ drinks on an occasion in the last 30 days.

²⁹ Heavy drinkers defined as males who consumed >60 drinks and females who consumed >30 drinks in the last 30 days

³⁰ Idaho Behavioral Risk Factors: Results from the 2011 Behavioral Risk Factor Surveillance System. Idaho Department of Health and Welfare, Division of Health, Bureau of Vital Records and Health Statistics, 2014

Mental and Emotional Health

Behavioral health conditions are a significant area of concern. Measures of perceived wellness can be indicative of mental and emotional health concerns. In 2012, 3.3% of Idahoans reported poor mental health days. From 2008-2009, 22.5% of Idahoans age 18 or older had a mental illness, 5.8% had a severe mental illness, and 7.5% of people aged 18 or older had a major depressive episode. In 2010, suicide was the second leading cause of death for Idahoans aged 15–34 and for males aged 10–14. Idaho had the 6th highest suicide rate in the nation, which was 49% higher than the national average. 32

Childhood Immunizations

Compared with other states, Idaho ranks poorly on childhood immunizations. According to America's Health Rankings 2012, Idaho ranks 46th for childhood immunization.^{33,34} Despite consistently high rates of childhood immunization between 2005-2012, the percentage of children receiving recommended doses of childhood immunizations declined sharply from 2012-2013 (87.33% to 63%, respectively).³⁴

Mortality Rates

Across Idaho, each region experiences elevated mortality rates as a result of different health factors. However, regions 1 and 2 seem to experience higher than typical adult and infant mortality, as well as deaths resulting from suicide, heart disease, cancer, and chronic lower respiratory diseases. Exhibit H highlights death rates due to several key health behaviors and chronic diseases by each region in the State.

EXHIBIT H. KEY HEALTH FACTORS AND OUTCOMES BY REGION AND STATE. 2011³⁵

Health Factor/Outcome	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Idaho
Population	214,625	106,217	256,653	443,851	187,012	170,147	206,480	1,584,985
Live births	11.0	10.8	14.7	13.0	14.7	15.2	19.0	14.1
Low birth weight	5.6%	4.6%	5.5%	6.1%	7.7%	7.5%	5.3%	6.1%
Mortality	951.4	968.8	741.9	643.7	825.1	760.5	639.8	756.5
Infant mortality	5.1	8.7	5.6	4.9	4.4	5.4	3.8	5.0

http://www.samhsa.gov/data/2k12/MHUS2010/MHUS-2010.pdf

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014

Page 11 of 18

³¹ Mental Health, United States, 2010 Report produced by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration,

³² http://www.spanidaho.org/facts.shtml

³³ The percentage of children receiving recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella, and PCV vaccines by age 19 to 35 months.

³⁴ http://www.americashealthrankings.org/measures/Measure/ID/Immunize

³⁵ http://healthandwelfare.idaho.gov/Portals/0/Health/Statistics/District & county.pdf

EXHIBIT H. KEY HEALTH FACTORS AND OUTCOMES BY REGION AND STATE, 201135 (CONTINUED)

Health Factor/Outcome	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Idaho
Influenza and pneumonia deaths	11.6	17.9	16.0	10.1	19.8	18.2	10.2	13.8
Suicide	21.0	19.8	19.9	15.1	18.2	17.0	17.9	17.9
Diabetes deaths	31.2	24.5	23.0	15.8	24.1	25.3	34.9	24.1
Heart disease deaths	207.8	196.8	148.4	133.8	163.1	186.3	129.3	158.9
Cancer deaths	233.9	202.4	155.9	143.5	167.9	142.2	120.6	161.5
Chronic lower respiratory disease deaths	68.0	75.3	56.5	46.0	59.9	40.6	34.9	52.2

ACCESS TO HEALTHCARE SERVICES

The extent to which Idaho residents have access to health care services is key to understanding health care use and existing gaps that can potentially be filled by bolstering telehealth services throughout the State.

Idaho residents living in one of the 12 large population areas—Boise (population 205,000), Nampa (81,000), Meridian (75,000), Idaho Falls (56,000), Pocatello (54,000), and seven additional cities with population sizes ranging from 20,000 to 50,000³⁶-have a greater choice compared with their rural neighbors. These areas afford residents access to private health care systems and smaller physician practices. While residents in rural counties primarily receive care from small physician practices or solo practices, federally qualified health centers (FQHCs) and the public health system provide increased choice of care. As described in the SHIP:

The State's 12 nonprofit FQHCs and 1 FQHC "look alike," are located in 37 counties, expand the choice of care for Idahoans in rural and medically underserved areas, and function as critical care providers for the uninsured. As in many rural States, Idaho's public health system also plays a critical role as a service provider. Direct services offered by the seven local public health districts range from community and home health nursing to dental hygiene and nutrition.

Access to health care is particularly challenging for tribal communities. In the SHIP (2013), tribal representatives noted that tribal communities experience serious difficulties accessing adequate health services, particularly for behavioral health. Primary care providers in tribal health centers or the Indian Health Service (HIS) experience difficulties coordinating care with providers outside of the tribal community.

³⁶State of Idaho (2013). Idaho Statewide Healthcare Innovation Plan (SHIP)

The following sections describe key factors related to use and access to health care services among Idaho residents.

Health Care Utilization

According to HRSA (2003), health care in Idaho carries an annual cost of \$7,713 per resident.³⁷ More than half of Idahoans receive health insurance coverage through commercial health insurers, and approximately 19,922 Idaho residents were enrolled in Idaho's health care exchange as of January 2014.³⁸ An additional 15% are enrolled in Medicare and 15% are enrolled in Idaho's Medicaid program. For the 18% of Idahoans without health insurance coverage, local public health districts and nonprofit FQHCs play a vital role in providing care throughout communities around the State.³⁹

Idaho residents also take advantage of health insurance coverage to obtain health screenings according to health care guidelines; among Medicare enrollees in 2012, 63% of residents received mammography screenings⁴⁰ and 82% received diabetic screenings according to health guidelines. In 2010, 98% of mothers who were eligible for Idaho's Women, Infants, and Children (WIC) program received well-baby care. Assessing the extent to which health care services are being utilized in the most efficient and effective manner is important for understanding health status. In 2012, only 45 hospital stays for every 100,000 were preventable. Idaho has one of the country's lowest hospital admission rates (81 per 1,000 in 2011), a measure that is held as one of the standards for evaluation of use and appropriate use of hospital services, as well as a reflection of quality and patient engagement in primary care related to avoidable treatment. Exhibit I provides an overview of key utilization rates among Idahoans in 2012.

EXHIBIT I. KEY UTILIZATION RATES AMONG IDAHOANS, 2012⁴³

- Well-child visits in the first 15 months of life: 38.22% for 6+ visits
- Well-child visits in the 3rd through 6th years of life: 51.4%
- Adolescent well-care visits: 30.53%
- Emergency department visits: 11.5 visits per 1,000 member months
- Asthma patients with one or more asthma-related emergency department visit: 2.99%

Among Medicare recipients, the extent to which Idahoans use available health services varies greatly across health factors. Exhibit J highlights utilization rates for select health factors/conditions.

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014 Page 13 of 18

³⁷ Price-adjusted Medicare spending per enrollee.

³⁸ http://boisestatepublicradio.org/post/idaho-s-health-insurance-exchange-enrollment-increases-1000-percent

³⁹ State of Idaho (2013). SHIP Report

⁴⁰ Percent of female Medicare enrollees age 40-64 who receive mammography screening.

⁴¹ Percent of diabetic Medicare enrollees age 40-64 who receive HbA1c screening.

 $^{^{42}\} http://healthandwelfare.idaho.gov/Portals/0/Users/074/54/1354/2010\%20PRATS\%20Report\%20FINAL.pdf$

⁴³ Derived from: Idaho (2013). Idaho Statewide Healthcare Innovation Plan (SHIP).

EXHIBIT J. HEALTH SERVICE UTILIZATION AMONG IDAHOANS

Health Service	Percent Utilization
Diabetic Screenings ⁴⁴	82%
Mammography Screenings ⁴⁵	63%
Colorectal Cancer Screenings ⁴⁶	12.1%

Health Care Providers

The availability of health provider types throughout the State varies greatly. In 2011, there were 1.6 physicians per 1,000 residents in Idaho, compared with 2.5 physicians per 1,000 in the United States. ⁴⁷ Across individual counties, the availability of physicians ranges from zero per 1,000 in Camas County to 2.9 per 1,000 population. ⁴⁸

While Idaho experiences a significant shortage of primary care providers, the shortage of mental health providers is even more substantial. Specifically, there is

- one dentist for every 1,586 Idahoans,
- one primary care physician for every **1,969 Idahoans**,
- one mental health professional for every **19,583 Idahoans.** ⁴⁸

Of the 61 hospitals in Idaho, 27 are **critical access hospitals** (CAHs). These facilities play an essential role providing care to rural communities throughout the nation (see Appendix B for full list of CAHs in Idaho). CAHs are certified under a set of Medicare Conditions of Participation (CoP) that focus on limiting the size of the patient population and length of stay to allow providers to focus on providing care for common conditions and outpatient care while referring more serious conditions to larger hospitals. CAHs receive financial incentives to engage their communities in assessing community health and health system needs, developing collaborative systems of health service delivery.

Health Professional Shortage Areas

Health professional shortage areas (HPSAs) are defined as geographic areas, populations, or facilities identified as having too few primary medical, dental, or mental health providers to meet the needs of a given community. Idaho currently contains 336 designated HPSAs.⁴⁹ The Idaho health care delivery system is challenged by a shortage of primary care providers and large rural areas that limit accessibility to critical health care services for Idahoans. Currently, **HPSAs in Idaho include 78 primary care providers, 70 dental providers, and 36 mental health providers.** Ninety-six percent of Idaho is a federally designated shortage area in primary care.⁴⁹

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014 Page 14 of 18

⁴⁴ Percent of diabetic Medicare enrollees who receive HbA1c screening

⁴⁵ Percent of female Medicare enrollees who receive mammography screening

⁴⁶ Adults aged 50+ who have had a blood stool test within the past 2 years

⁴⁷ http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16000&IndicatorID=29

⁴⁸ http://indicatorsidaho.org/DrawRegion.aspx?Action=DrawRankings&RegionID=16000&IndicatorID=29

⁴⁹ http://datawarehouse.hrsa.gov/topics/hrsainyour/factsheetstate.aspx?geocd=16

Similarly, medically underserved areas (MUAs) are areas in which there are too few personal health services to meet the needs of the population. Medically underserved populations (MUPs) are populations determined to face economic, linguistic, or cultural barriers to health care. These populations also have high infant mortality, high poverty and/or high elderly populations. Idaho consists of 39 MUAs and 7 MUPs.⁵⁰

Exhibit K illustrates the number of HPSAs, MUAs, and MUPs in Idaho. Data for Idaho regions are unavailable.

EXHIBIT K. IDAHO SHORTAGE AREAS BY HEALTH CARE PROVIDER TYPE⁴⁸

		ldaho	
	Primary Care	Dental	Mental Health
Health Professional Shortage Areas (HPSA)	74	70	36
Medically Underserved Areas (MUA)		39	
Medically Underserved Populations (MUP)		7	

One hundred percent of Idaho is federally designated as a shortage area in mental health care, indicating a lack of psychiatrists, psychologists, or both in several counties. Specifically, 23% of the overall population lives in a county without a psychiatrist, 14% live in a county without a psychologist, and 13% live in a county without a psychiatrist or psychologist. Exhibit L illustrates the extent to which Idaho and its regions are lacking mental health care providers.

EXHIBIT L. NUMBER OF COUNTIES LACKING MENTAL HEALTH PROVIDERS BY REGION

Region	No psychiatrist	No psychologist	No psychiatrist or psychologist
Region 1	3	3	3
Region 2	2	3	2
Region 3	5	3	3
Region 4	2	2	1
Region 5	5	4	4
Region 6	5	5	5
Region 7	6	3	3
Idaho	28	23	21

Current State of Telehealth Service Delivery

In July 2013, the Idaho Telehealth Task Force surveyed CAHs in Idaho to better understand the extent to which each institution had the adequate connectivity and necessary equipment to provide telehealth services. Fifteen hospitals provided a response to indicate whether they had adequate connectivity to provide telehealth services; of those, 12 indicated they have adequate connectivity. Similarly, 16 hospitals provided a response to indicate whether they have the necessary equipment; of those, 10 hospitals indicated they have necessary equipment. Exhibit M provides a brief summary of the survey results from the CAHs in the seven regions.

_

⁵⁰ http://muafind.hrsa.gov/

EXHIBIT M. TELEHEALTH SERVICES OFFERED BY REGION⁵¹

Region	Number of CAHs in Region	CAHs Reported Offering Telehealth	Type(s) of Telehealth Offered by CAHs	CAHs with Adequate Connectivity	CAHs with Adequate Equipment
Region 1	4	a. Benewah Communityb. Bonner Generalc. Boundary Communityd. Kootenai Countrye. Shoshone Medical Center	 Psychiatry (a) Radiology (c) 	4	3
Region 2	4	a. Clearwater Valleyb. St. Mary'sc. Syringa General Hospitald. Gritman Medical Center	 Psychiatry (adult & child) (a, b) Dermatology (a, b) Emergency Room (ER) backup (a, b) Hospitalist (a, b) Psychiatry (c) Pediatric psychiatry (d) Cardiology (a) 	3	3
Region 3	2	a. Walter Knox Memorial	N/A	0	1
Region 4	3	a. St. Luke's, Mt. Homeb. St. Luke's, McCallc. Cascade Medical Center	 Wound care clinics (a, b, c) e-ICU inpatient consultations (b, c) Installed emergency room for consultations (b, c) Emergency Room (c) Heart (c) Stroke (c) Psychiatry (c) 	1	1
Region 5	5	a. St. Luke's, Jerome	e-ICU inpatient consultations (a) Installed emergency room for consultations (a) Wound care clinics (a)	1	0

_

⁵¹ These data reflect responses from hospitals that completed the survey and may not be reflective of the entire region. In some cases, hospitals reported offering telehealth services but did not specify which telehealth services are offered.

EXHIBIT M. TELEHEALTH SERVICES OFFERED BY REGION⁵² (CONTINUED)

Region	Number of CAHs in Region	CAHs Reported Offering Telehealth	Type(s) of Telehealth Offered by CAHs	CAHs with Adequate Connectivity	CAHs with Adequate Equipment
Region 6	6	a. Bear Lake Memorialb. Oneida Countyc. Lost Riverd. Franklin County	 Psychiatry (a, b, c, d) Oncology (b) 	1	1
Region 7	3	 a. Eastern Idaho Regional Medical Center (EIRMC) b. Steele Memorial c. Driggs Community/ Teton Valley 	 Stroke (a) Psychiatry (b, c) Oncology (b) 	2	2

As illustrated, the top telehealth services offered by participating hospitals were psychiatry/psychology (10), emergency care (6), and wound care (4). Hospitals were also asked to describe any key telehealth services they would like to see in their respective communities. The figure below illustrates the key services identified by hospitals (font sizes correspond with the frequency of responses provided).

These data reflect responses from hospitals that completed the survey and may not be reflective of the entire region. In some cases, hospitals reported offering telehealth services but did not specify which telehealth services are offered.



Gaps in Health Insurance Coverage and Utilization

When considering the need for expanded telehealth services in Idaho, it is important to consider gaps in health care coverage and use throughout the State. In 2012, 19% of Idaho residents were uninsured. Forty-seven percent of Idaho residents did not have dental health insurance and 32% did not receive any dental care within the previous 12 months. Between 2004 and 2010, 15% of Idaho residents reported not being able to see a doctor during the previous 12 months due to high cost. In 2010, only 40% of mothers who were eligible for the WIC program used this health coverage.

LIMITATIONS

The purpose of this assessment is to provide a comprehensive overview of the state of health in Idaho. However, it is important to note a few limitations with respect to the development of this assessment.

- It included synthesis of secondary data only—no primary data were collected or reviewed for this assessment.
- In many cases, regional-level data were not available for the health variables of interest, allowing the assessment to include only State- and national-level data.
- Some data variables of interest were not available for recent years.
- The hospital survey was administered to 27 CAHs in Idaho. A survey administered to a larger pool of hospitals across all counties and regions may provide a more extensive look at Idahoans' current state of health.

NEXT STEPS

This population health assessment will be reviewed and discussed by the Idaho Task Force. It will be used to inform recommendations for the expansion of telehealth services throughout Idaho.

TELEHEALTH EVALUATION: POPULATION HEALTH ASSESSMENT

June 2014

Page 18 of 18

⁵³ http://www.countyhealthrankings.org/app/idaho/2014/measure/outcomes/1/map

 $^{^{54}\} http://www.healthandwelfare.idaho.gov/Portals/0/Users/074/54/1354/BRFSS\%20Annual\%20Report\%202010.pdf$

⁵⁵ http://healthandwelfare.idaho.gov/Portals/0/Users/074/54/1354/2010%20PRATS%20Report%20FINAL.pdf

APPENDIX A

Critical Access Hospital Questionnaire

APPENDIX A. CRITICAL ACCESS HOSPITAL QUESTIONNAIRE

Idaho Telehealth Taskforce

Telehealth Questionnaire Idaho Critical Access Hospitals July 2013

- 1. Do you believe your facility has adequate connectivity to provide Telehealth services for your patients?
- 2. Does your facility have the necessary equipment to provide Telehealth services?
- 3. Does your facility currently provide Telehealth Services?
 - a. If so, what services do you provide?
 - b. If so, from whom do you receive these services?
 - c. How often do you offer these Telehealth Services?
 - d. Approximately how many patient Tele-visits per week do you support?
- 4. What new Telehealth services would you like to see in your community?
- 5. Who would be the main contact person for Telehealth advancement at your facility?

Please Return to:

Michael Meza, M.D. Executive Committee Idaho Telehealth Taskforce

Email: Michael.meza@me.com

Or

Fax: 208-292-4621

Thank you for your assistance on this very important project to improve access to care for Idaho residents.

APPENDIX B

Critical Access Hospitals in Idaho

APPENDIX B. CRITICAL ACCESS HOSPITALS IN IDAHO

Bear Lake Hospital	Montpelier	Idaho	83254	2001-02-05	21
Benewah Community Hospital	St. Maries	Idaho	83861	2001-07-01	19
Bingham Memorial Hospital	Blackfoot	Idaho	83221-1799	2004-01-01	25
Bonner General Hospital Sandpoint	Sandpoint	Idaho	83864	2010-10-01	25
Boundary County Community Hospital	Bonners Ferry	Idaho	83805	1999-04-08	20
Caribou Memorial Hospital	Soda Springs	Idaho	83276	2000-07-01	25
Cascade Medical Center	Cascade	Idaho	83611	2000-06-01	10
Cassia Regional Medical Center	Burley	Idaho	83318	2004-10-01	25
Clearwater Valley Hospital	Orofino	Idaho	83544	2003-02-01	23
Elmore Medical Center	Mountain Home	Idaho	83647	2000-08-01	25
Franklin County Medical Center	Preston	Idaho	83263	2003-08-01	20
Gooding County Memorial Hospital	Gooding	Idaho	83330	1999-05-18	14
Gritman Medical Center	Moscow	Idaho	83843	2004-11-01	25
Harms Memorial Hospital District	American Falls	Idaho	83211	1999-07-16	10
Lost Rivers District Hospital	Arco	Idaho	83213	2003-09-29	14
McCall Memorial Hospital	McCall	Idaho	83638	2000-10-01	15
Minidoka Memorial Hospital	Rupert	Idaho	83350	2001-10-01	25
Oneida County Hospital	Malad City	Idaho	83252	1999-07-01	11
Shoshone Medical Center	Kellogg	Idaho	83837	2000-12-01	25
St. Luke's Wood River Medical Center	Ketchum	Idaho	83340	2003-08-16	25
St. Mary's Hospital	Cottonwood	Idaho	83522	2003-02-01	23
St. Benedict's Family Medical Center	Jerome	Idaho	83338	2000-07-01	23
Steele Memorial Hospital	Salmon	Idaho	83467	1999-12-14	18
Syringa General Hospital	Grangeville	Idaho	83530	2001-02-01	16
Teton Valley Hospital	Driggs	Idaho	83422	2000-10-03	13
Walter Knox Memorial Hospital	Emmett	Idaho	83617	2001-10-01	16
Weiser Memorial Hospital	Weiser	Idaho	83672	2000-05-01	25

June 2014 Appendix B